

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently Amended) A continuous casting mold for casting molten metals, particularly molten steel materials, at high casting rates to form polygonal billet, bloom, and preliminary section castings and the like, comprising a tubular mold made of copper or of copper alloys whose entry cross-section on a the pouring-in side has a cross-section which is enlarged compared to an the exit cross-section on a the casting exit side, the mold also having and corner radii, wherein the mold has an inner geometrical cross-section below the entry cross-section, the inner geometrical cross-section form and the associated dimensions measurements are designed analogous to a the locally deducible quantity of a the solidification heat for the continuous casting according to a the progression of the temperature progression diagram along across the mold height, starting with a the cross-section enlargement on the pouring-in side opposite the exit cross-section on the casting exit side, wherein on the pouring-in side, in an the area of the casting

surface mirror a first conical section of great conicity, and immediately adjacent a second section having of greater conicity, and beneath under the section of greater conicity, a section with continuously variable conicity corresponding according to the casting shell growth and the contraction of the continuous casting up to until the exit cross-section are is successively arranged such that the wall volume of the mold is reduced according to the dissipated heat quantity per time unit and a heat dissipation diagram across the mold height by enlarging the exterior surface of the tubular mold by means of notches or the like and by reducing the wall thickness in at least separate height ranges of the mold analogous to the thermal expansion of the mold.

2. (Canceled)

3. (Canceled)

4. (Currently Amended) The continuous casting mold according to claim 1, wherein, starting at the entry cross-section, a centric, approximately parabola-shaped recess is provided for each cross-section side of the mold.

5. (Previously presented) The continuous casting mold according to claim 4, wherein the approximately parabola-shaped recess diminishes in the direction towards the casting exit side.
6. (Previously presented) The continuous casting mold according to claim 4, wherein the length of the approximately parabola-shaped recess extends approximately into half the tubular mold height.
7. (Currently Amended) The continuous casting mold according to claim 4, wherein the length of the approximately parabola-shaped recess is adapted to the contraction amount measure at the height of the respective broadside and/or narrowside edge of the mold cross-section.
8. (Currently Amended) The continuous casting mold according to claim 1, wherein in the area of each [[a]] corner radius in the cross-section plane of the entry cross-section one adjoining, circumferentially extending surface each extends downwards toward ~~to~~ the casting surface mirror which connects to an analogous identical counter surface starting at the casting surface up to a ~~mirror until the~~ transition into the geometrical cross-section form.